ENVIRONMENTAL CHEMISTS

Date of Report: 03/22/00 Date Received: 03/16/00

Project: Metro Self Monitor, PO# M63755

Date Extracted: 03/17/00 Date Analyzed: 03/20/00

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID Laboratory ID	<u>Chromium</u>	Copper	<u>Nickle</u>	<u>Zinc</u>
M63755	0.38	0.43	0.43	<0.05
003105-01	0.30	U.4 0	0.40	70.03
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Date of Report: 03/22/00 Date Received: 03/16/00

Project: Metro Self Monitor, PO# M63755

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 003100-01 (Duplicate)

			Adapi Gallanda e		Relative		
		Reporting	Sample	Duplicate	Percent	Acceptance	
1	Analyte	Units	Result	Result	Difference	. Criteria	8 9"
	Chromium	μg/g (ppm)	0.06	0.06	0	0-20	
	Copper	mg/L (ppm)	< 0.05	< 0.05	nm	0-20	
	Nickel	mg/L (ppm)	0.06	< 0.05	nm	0-20	
	Zinc	mg/L (ppm)	4.9	4.9	0	0-20	

Laboratory Code: 003100-01 (Matrix Spike)

			Reporting	Spike	Sample	% Recov	ery	% Recov	ery	Acceptance	31,1	
	Analyte	2 6 52	Units	Level	Result	MS	-13	MSD		Criteria	RPI)
9 8	Chromium		μg/g (ppm)	5	0.06	89	75	93	1. 1	80-120	4	9
	Copper		mg/L (ppm)	5	< 0.05	93		95	1 5 5	80-120	2	
	Nickel		mg/L (ppm)	10	0.06	86	s. le	90		80-120	5	
	Zinc		mg/L (ppm)	5	4.9	95		100		80-120	5	

Laboratory Code: Laboratory Control Sample

		Reporting	Spike	% Recov	ery % Red	covery	Acceptanc	e		
19 <u>.</u>	Analyte	 Units	Level	LCS	LC	SD	Criteria	111	RPD	
15.	Chromium	μg/g (ppm)	5	94	10	00	80-120		6	770
	Copper	mg/L (ppm)	5	90	9	7	80-120		8	
	Nickel	mg/L (ppm)	10	94	10	01	80-120		7	
	Zinc	mg/L (ppm)	5	99	10	03	80-120		4	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

FORMS/COC

(25 3.16.2K AZ,

003105 SAMPLE CHAIN OF CUSTODY

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02/25/00

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 22, 2000

DUPLICATE COPY

INVOICE #00ACU0322-1

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M63755- Results of testing requested by Gerald A. Thompson for material submitted on March 16, 2000.

1 sample analyzed for Total Chromium,
Copper, Nickel, and Zinc
by Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 22, 2000

Gerald A. Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 16, 2000 from your Metro Self Monitor, PO# M63755 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Dianne C. Hurt Project Manager

Enclosures ACU0322R.DOC